

QoS on Catalyst 6800ia Access Ports Configuration Example



Document ID: 119140

Contributed by Shashank Singh, Cisco TAC Engineer.

Jul 13, 2015

Contents

Introduction

Prerequisites

- Requirements

- Components Used

Background Information

Configure

- Configuration Example 1: Queue Bandwidth

- Configuration Example 2: Bandwidth and Buffer

Verify

Troubleshoot

Introduction

This document describes how to to configure, verify, and troubleshoot Quality of Service (QoS) on Cisco Catalyst 6800ia host ports. QoS is supported on 6800ia host ports in Cisco IOS® Software Release 152.1.SY and later on a Catalyst 6800 parent Virtual Switching System (VSS).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software and hardware versions:

- Cisco IOS® Software Release 152.1.SY
- Cisco Catalyst 6800 parent VSS

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Background Information

Configuration mode on a Catalyst 6800ia is disabled and all QoS configurations for 6800ia host ports must be done from the parent. QoS for 6800ia host port is configured with a policy-map. When applied to the

interfaces, this policy-map pushes the relevant configuration internally to the 6800ia and then programs the hardware queues.

6800ia host ports have 1p3q3t architecture in transmit (TX) direction. All configuration examples in this document apply only to TX queues on a 6800ia.

When there is no explicit QoS configuration present on the 6800ia interfaces in default state, the 6800ia host interface can look similar to this example output:

```
6880-VSS#show run int gi101/1/0/1
```

```
interface GigabitEthernet101/1/0/1
  switchport
  switchport trunk allowed vlan 500
  switchport mode access
  switchport access vlan 500
  load-interval 30
end
```

```
6880-VSS#show queueing interface gi101/1/0/1
```

```
Interface GigabitEthernet101/1/0/1 queueing strategy:  Weighted Round-Robin
```

```
Port QoS is disabled globally
Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled
```

```
Trust boundary disabled
```

```
Trust state: trust DSCP
Trust state in queueing: trust DSCP
Default COS is 0
Queueing Mode In Tx direction: mode-dscp
Transmit queues [type = 1p3q3t]:
Queue Id      Scheduling  Num of thresholds
```

```
-----
  1           Priority          3
  2           WRR              3
  3           WRR              3
  4           WRR              3
```

```
WRR bandwidth ratios:  100[queue 2] 100[queue 3] 100[queue 4]  0[queue 5]
queue-limit ratios:    15[Pri Queue] 25[queue 2] 40[queue 3] 20[queue 4]
```

```
queue thresh dscp-map
```

```
-----
1   1   32 33 40 41 42 43 44 45 46 47
1   2
1   3
2   1   16 17 18 19 20 21 22 23 26 27 28 29 30 31 34 35 36 37 38 39
2   2   24
2   3   48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
3   1   25
3   2
3   3   0 1 2 3 4 5 6 7
4   1   8 9 11 13 15
4   2   10 12 14
4   3
```

Configure

Configuration Example 1: Queue Bandwidth

This example shows how you can configure bandwidths for 6800ia TX queues:

1. Configure **class-maps** in order to classify traffic of interest:

```
class-map type lan-queuing match-any ltest
  match dscp 32
class-map type lan-queuing match-any ltest1
  match dscp 24
class-map type lan-queuing match-any ltest2
  match dscp default
```

2. Assign priority and bandwidth to configured classes:

```
policy-map type lan-queuing ltest
  class type lan-queuing ltest
    priority
  class type lan-queuing ltest1
    bandwidth remaining percent 30
  class type lan-queuing ltest2
    bandwidth remaining percent 20
  class class-default
```

3. Apply **policy-map** to the 6800ia interface in question:

Note: When you apply a **lan-queueing policy-map** to one port on a 6800ia stack, it propagates the changes to all ports in the stack.

```
6880-VSS#conf t
6880-VSS(config)#int gi101/1/0/1
6880-VSS(config-if)#service-policy type lan-queuing output ltest
Propagating [attach] lan queueing policy "ltest" to Gi101/1/0/1 Gi101/1/0/2 Gi101/1/0/3
Gi101/1/0/4 Gi101/1/0/5 Gi101/1/0/6 Gi101/1/0/7 Gi101/1/0/8 Gi101/1/0/9 Gi101/1/0/10
Gi101/1/0/12 Gi101/1/0/13 Gi101/1/0/14 Gi101/1/0/15 Gi101/1/0/16 Gi101/1/0/17
Gi101/1/0/18 Gi101/1/0/19 Gi101/1/0/20 Gi101/1/0/21 Gi101/1/0/22 Gi101/1/0/23
Gi101/1/0/24 Gi101/1/0/25 Gi101/1/0/26 Gi101/1/0/27 Gi101/1/0/28 Gi101/1/0/29
Gi101/1/0/30 Gi101/1/0/31 Gi101/1/0/32 Gi101/1/0/33 Gi101/1/0/34 Gi101/1/0/35
Gi101/1/0/36 Gi101/1/0/37 Gi101/1/0/38 Gi101/1/0/39 Gi101/1/0/40 Gi101/1/0/41
Gi101/1/0/42 Gi101/1/0/43 Gi101/1/0/44 Gi101/1/0/45 Gi101/1/0/46 Gi101/1/0/47 Gi101/1/0/48
```

```
Propagating [attach] lan queueing policy "ltest" to Gi101/2/0/1 Gi101/2/0/2
Gi101/2/0/3 Gi101/2/0/4 Gi101/2/0/5 Gi101/2/0/6 Gi101/2/0/7 Gi101/2/0/8
Gi101/2/0/9 Gi101/2/0/10 Gi101/2/0/11 Gi101/2/0/12 Gi101/2/0/13 Gi101/2/0/14
Gi101/2/0/15 Gi101/2/0/16 Gi101/2/0/17 Gi101/2/0/18 Gi101/2/0/19 Gi101/2/0/20
Gi101/2/0/21 Gi101/2/0/22 Gi101/2/0/23 Gi101/2/0/24 Gi101/2/0/25 Gi101/2/0/26
Gi101/2/0/27 Gi101/2/0/28 Gi101/2/0/29 Gi101/2/0/30 Gi101/2/0/31 Gi101/2/0/32
Gi101/2/0/33 Gi101/2/0/34 Gi101/2/0/35 Gi101/2/0/36 Gi101/2/0/37 Gi101/2/0/38
Gi101/2/0/39 Gi101/2/0/40 Gi101/2/0/41 Gi101/2/0/42 Gi101/2/0/43 Gi101/2/0/44
Gi101/2/0/45 Gi101/2/0/46 Gi101/2/0/47 Gi101/2/0/48
```

```
Propagating [attach] lan queueing policy "ltest" to Gi101/3/0/1 Gi101/3/0/2
Gi101/3/0/3 Gi101/3/0/4 Gi101/3/0/5 Gi101/3/0/6 Gi101/3/0/7 Gi101/3/0/8
Gi101/3/0/9 Gi101/3/0/10 Gi101/3/0/11 Gi101/3/0/12 Gi101/3/0/13 Gi101/3/0/14
Gi101/3/0/15 Gi101/3/0/16 Gi101/3/0/17 Gi101/3/0/18 Gi101/3/0/19 Gi101/3/0/20
Gi101/3/0/21 Gi101/3/0/22 Gi101/3/0/23 Gi101/3/0/24 Gi101/3/0/25 Gi101/3/0/26
Gi101/3/0/27 Gi101/3/0/28 Gi101/3/0/29 Gi101/3/0/30 Gi101/3/0/31 Gi101/3/0/32
Gi101/3/0/33 Gi101/3/0/34 Gi101/3/0/35 Gi101/3/0/36 Gi101/3/0/37 Gi101/3/0/38
Gi101/3/0/39 Gi101/3/0/40 Gi101/3/0/41 Gi101/3/0/42 Gi101/3/0/43 Gi101/3/0/44
Gi101/3/0/45 Gi101/3/0/46 Gi101/3/0/47 Gi101/3/0/48
```

```
Propagating [attach] lan queueing policy "ltest" to Gi101/4/0/1 Gi101/4/0/2
Gi101/4/0/3 Gi101/4/0/4 Gi101/4/0/5 Gi101/4/0/6 Gi101/4/0/7 Gi101/4/0/8
Gi101/4/0/9 Gi101/4/0/10 Gi101/4/0/11 Gi101/4/0/12 Gi101/4/0/13 Gi101/4/0/14
Gi101/4/0/15 Gi101/4/0/16 Gi101/4/0/17 Gi101/4/0/18 Gi101/4/0/19 Gi101/4/0/20
```

```

Gi101/4/0/21 Gi101/4/0/22 Gi101/4/0/23 Gi101/4/0/24 Gi101/4/0/25 Gi101/4/0/26
Gi101/4/0/27 Gi101/4/0/28 Gi101/4/0/29 Gi101/4/0/30 Gi101/4/0/31 Gi101/4/0/32
Gi101/4/0/33 Gi101/4/0/34 Gi101/4/0/35 Gi101/4/0/36 Gi101/4/0/37 Gi101/4/0/38
Gi101/4/0/39 Gi101/4/0/40 Gi101/4/0/41 Gi101/4/0/42 Gi101/4/0/43 Gi101/4/0/44
Gi101/4/0/45 Gi101/4/0/46 Gi101/4/0/47 Gi101/4/0/48
6880-VSS(config-if)#
6880-VSS(config-if)#end

```

4. Verify that **policy-map** is applied:

```
6880-VSS#show run int gi101/1/0/1
```

```

interface GigabitEthernet101/1/0/1
  switchport
  switchport trunk allowed vlan 500
  switchport mode access
  switchport access vlan 500
  load-interval 30
  service-policy type lan-queuing output ltest
end

```

5. Check class-map to queue mapping, bandwidth and buffer allocations, and queue to Differentiated Services Code Point (DSCP) mapping:

```
6880-VSS#show queueing int gi101/1/0/1
```

```
Interface GigabitEthernet101/1/0/1 queueing strategy: Weighted Round-Robin
```

```

Port QoS is disabled globally
Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled

```

Trust boundary disabled

```

Trust state: trust DSCP
Trust state in queueing: trust DSCP
Default COS is 0

```

Class-map to Queue in Tx direction

Class-map	Queue Id
ltest	1
ltest1	4
ltest2	3
class-default	2

Queueing Mode In Tx direction: mode-dscp

Transmit queues [type = lp3q3t]:

Queue Id	Scheduling	Num of thresholds
1	Priority	3
2	WRR	3
3	WRR	3
4	WRR	3

WRR bandwidth ratios: **50[queue 2] 20[queue 3] 30[queue 4]**

queue-limit ratios: 15[Pri Queue] 100[queue 2] 100[queue 3] 100[queue 4]

queue thresh dscp-map

Queue Id	Class-map	Threshold	DSCP
1	1	32	
1	2		
1	3		
2	1	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	
		23 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41 42 43	
		44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	
2	2		
2	3		
3	1	0	
3	2		

```

3      3
4      1      24
4      2
4      3

```

6. Double check buffer and bandwidth allocations from the 6800ia:

Note: If you do not specify buffer weight for a certain class, by default it takes 100%.

Queue 1: $15 / [15+100+100+100] = 4$

Queue 2: $100 / [15+100+100+100] \sim 31$

Weights are also derived for other queues.

```
6880-VSS#remote command fex 101 show mls qos int gil/0/1 buffer
```

```
GigabitEthernet1/0/1
```

```
The port is mapped to qset : 1
```

```
The allocations between the queues are : 4 31 31 34
```

```
6880-VSS#remote command fex 101 show mls qos int gil/0/1 queueing
```

```
GigabitEthernet1/0/1
```

```
Egress Priority Queue : enabled
```

```
Shaped queue weights (absolute) : 0 0 0 0
```

```
Shared queue weights : 0 127 51 76
```

```
The port bandwidth limit : 100 (Operational Bandwidth:100.0)
```

```
The port is mapped to qset : 1
```

7. Verify if interested traffic is enqueued in the respective queue and if there are any drops:

```
6880-VSS#remote command fex 101 show mls qos int gil/0/1 statistic
```

```
GigabitEthernet1/0/1 (All statistics are in packets)
```

```

dscp: incoming
-----
 0 - 4 :          0          0          0          0          0
 5 - 9 :          0          0          0          0          0
10 - 14 :         0          0          0          0          0
15 - 19 :         0          0          0          0          0
20 - 24 :         0          0          0          0          0
25 - 29 :         0          0          0          0          0
30 - 34 :         0          0          0          0          0
35 - 39 :         0          0          0          0          0
40 - 44 :         0          0          0          0          0
45 - 49 :         0          0          0          13         0
50 - 54 :         0          0          0          0          0
55 - 59 :         0          0          0          0          0
60 - 64 :         0          0          0          0          0
dscp: outgoing
-----
 0 - 4 :          0          0          0          0          0
 5 - 9 :          0          0          0          0          0
10 - 14 :         0          0          0          0          0
15 - 19 :         0          0          0          0          0
20 - 24 :         0          0          0          0          9118500
25 - 29 :         0          0          0          0          0
30 - 34 :         0          0          516236         0          0
35 - 39 :         0          0          0          0          0
40 - 44 :         0          0          0          0          0
45 - 49 :         0          0          0          20         0

```

```

50 - 54 :          0          0          0          0          0
55 - 59 :          0          0          0          0          0
60 - 64 :          0          0          0          0          0
  cos: incoming
-----

 0 - 4 :         106          0          0          0          0
 5 - 7 :          0          0          0          0          0
  cos: outgoing
-----

 0 - 4 :          41          0          0      9118505      516236
 5 - 7 :          0          0          0          0          0
  output queues enqueued:
  queue:   threshold1  threshold2  threshold3
-----
queue 0:      516255          35          5
  queue 1:         12          0          0
  queue 2:          0          0          0
queue 3:      9118520          0          0

  output queues dropped:
  queue:   threshold1  threshold2  threshold3
-----
  queue 0:          0          0          0
  queue 1:          0          0          0
  queue 2:          0          0          0
queue 3:      49823          0          0

Policer: Inprofile:          0 OutofProfile:          0

```

Configuration Example 2: Bandwidth and Buffer

This example shows how you can configure bandwidths and buffers for 6800ia TX queues:

1. In the policy-map created in example 1, you can specify queue buffer allocations as this example shows:

Note: If you do not specify buffer weight for a certain class, by default it takes 100%.

```

policy-map type lan-queuing ltest
  class type lan-queuing ltest
    priority
    queue-buffers ratio 15
  class type lan-queuing ltest1
    bandwidth remaining percent 30
    queue-buffers ratio 30
  class type lan-queuing ltest2
    bandwidth remaining percent 20
    queue-buffers ratio 40
  class class-default
    queue-buffer ratio 15

```

2. Check class-map to queue mapping, bandwidth and buffer allocations, and queue to DSCP mapping:

```

6880-VSS#sh queueing int gi101/1/0/1
Interface GigabitEthernet101/1/0/1 queueing strategy:  Weighted Round-Robin

  Port QoS is disabled globally
  Queueing on Gi101/1/0/1: Tx Enabled Rx Disabled

Trust boundary disabled

Trust state: trust DSCP

```

```
Trust state in queueing: trust DSCP
Default COS is 0
Class-map to Queue in Tx direction
Class-map          Queue Id
-----
ltest             1
ltest1           4
ltest2           3
class-default   2
```

```
Queueing Mode In Tx direction: mode-dscp
Transmit queues [type = lp3q3t]:
Queue Id    Scheduling  Num of thresholds
-----
1           Priority    3
2           WRR         3
3           WRR         3
4           WRR         3
```

```
WRR bandwidth ratios: 50[queue 2] 20[queue 3] 30[queue 4]
queue-limit ratios: 15[Pri Queue] 15[queue 2] 40[queue 3] 30[queue 4]
```

```
queue thresh dscp-map
-----
1 1 32
1 2
1 3
2 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
22 23 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
2 2
2 3
3 1 0
3 2
3 3
4 1 24
4 2
4 3
```

3. Double check buffer and bandwidth allocations from the 6800ia:

```
6880-VSS#remote command fex 101 sh mls qos int gil/0/1 queueing
```

```
GigabitEthernet1/0/1
Egress Priority Queue : enabled
Shaped queue weights (absolute) : 0 0 0 0
Shared queue weights : 0 127 51 76
The port bandwidth limit : 100 (Operational Bandwidth:100.0)
The port is mapped to qset : 1
```

```
6880-VSS#remote command fex 101 sh mls qos int gil/0/1 buffers
```

```
GigabitEthernet1/0/1
The port is mapped to qset : 1
The allocations between the queues are : 15 15 40 30
```

4. Verify if interested traffic is enqueued in the respective queue and if there are any drops:

```
6880-VSS#remote command fex 101 sh mls qos int gil/0/1 statistic
```

```
GigabitEthernet1/0/1 (All statistics are in packets)
```

```
dscp: incoming
-----
0 - 4 :          0          0          0          0          0
```

```

 5 - 9 :          0          0          0          0          0
10 - 14 :         0          0          0          0          0
15 - 19 :         0          0          0          0          0
20 - 24 :         0          0          0          0          0
25 - 29 :         0          0          0          0          0
30 - 34 :         0          0          0          0          0
35 - 39 :         0          0          0          0          0
40 - 44 :         0          0          0          0          0
45 - 49 :         0          0          0          491         0
50 - 54 :         0          0          0          0          0
55 - 59 :         0          0          0          0          0
60 - 64 :         0          0          0          0          0

```

dscp: outgoing

```

-----
 0 - 4 :          0          0          0          0          0
 5 - 9 :          0          0          0          0          0
10 - 14 :         0          0          0          0          0
15 - 19 :         0          0          0          0          0
20 - 24 :         0          0          0          0          57864687
25 - 29 :         0          0          0          0          0
30 - 34 :         0          0          29364400         0          0
35 - 39 :         0          0          0          0          0
40 - 44 :         0          0          0          0          0
45 - 49 :         0          0          0          775         0
50 - 54 :         0          0          0          0          0
55 - 59 :         0          0          0          0          0
60 - 64 :         0          0          0          0          0

```

cos: incoming

```

-----
 0 - 4 :          5323          0          0          0          0
 5 - 7 :           0          0          0          0          0

```

cos: outgoing

```

-----
 0 - 4 :          1718          0          0          57864691          29364400
 5 - 7 :           0          0          0          0          0

```

```

output queues enqueued:
queue:  threshold1  threshold2  threshold3
-----
queue 0:  29365402      1883         5
queue 1:       793         98         0
queue 2:         0         0         0
queue 3:  530554174         0         0

```

```

output queues dropped:
queue:  threshold1  threshold2  threshold3
-----
queue 0:         0         10         0
queue 1:         1        24093         0
queue 2:         0         0         0
queue 3:  2309351         0         0

```

Policer: Inprofile: 0 OutofProfile: 0

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

This section provides information you can use to troubleshoot your configuration.

The Output Interpreter Tool (registered customers only) supports certain **show** commands. Use the Output Interpreter Tool in order to view an analysis of **show** command output.

Note: Refer to Important Information on Debug Commands before you use **debug** commands.

1. Enable **debug** for qos-manager from the 6800ia CLI. Ensure logs are redirected to buffer and logging buffer is set to a high number:

```
6880-VSS#attach fex 101
Attach FEX:101 ip:192.168.1.101
Trying 192.168.1.101 ... Open
???????FEX-101>en
Password: cisco
FEX-101#
FEX-101#debug platform qos-manager all
QM verbose debugging is on
QM cops debugging is on
QM events debugging is on
QM Statistics debugging is on
FEX-101#exit
[Connection to 192.168.1.101 closed by foreign host]
```

2. Configure the **policy-map** in order to trigger debugs:

```
6880-VSS#conf t
6880-VSS(config)#int gi101/1/0/1
6880-VSS(config-if)# service-policy type lan-queuing output ltest
Propagating [attach] lan queueing policy "ltest" to Gi101/1/0/1
Gi101/1/0/2 Gi101/1/0/3 Gi101/1/0/4 Gi101/1/0/5 Gi101/1/0/6 Gi101/1/0/7 Gi101/1/0/8
Gi101/1/0/9 Gi101/1/0/10 Gi101/1/0/12 Gi101/1/0/13 Gi101/1/0/14 Gi101/1/0/15 Gi101/1/0/16
<snip>
6880-VSS(config-if)#end
```

3. Check logs on the Fabric Extender (FEX) in order to check debugs:

```
6880-VSS#remote command fex 101 show log
<snip>
May 20 06:43:18.208: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
****Setting Priority Queue (FEX-101)

May 20 06:43:18.208: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:18.208: HQM: hulc_f
_fex_qos_priority_handler:QueueNum=1 PriorityQueue=1 queuetype=2 thresholdsnum=3 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
idb=GigabitEthernet1/0/1 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
idb=GigabitEthernet1/0/2 (FEX-101)
May 20 06:43:18.212: HQM: hulc_fex_qos_priority_handler: hulc_fex_qos_priority_handler:
idb=GigabitEthernet1/0/3 (FEX-101)
<snip>

hulc_fex_qos_srr_weight_setting:****Setting weight for queues**** (FEX-101)
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting
QueueNum=1 RRTYPE=0 WeightRelative=0 WeightAbsolute=0 (FEX-101)
```

20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting:
ratio is 0 for queue 1 (FEX-101)
May 20 06:43:18.232: HQM: hulc_fex_qos_srr_weight_setting: hulc_fex_qos_srr_weight_setting
QueueNum=2 RRType=0 WeightRelative=33 WeightAbsolute=0 (FEX-101)
<snip>

20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: **Setting buffer for output queues (FEX-**
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: hulc_fex_qos_buffer_conf:
subopcode=2 startport=0 endport=0 size=4 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf: hulc_fex_qos_buffer_conf:
queuenum=1 size=15 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=2 size=25 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=3 size=40 (FEX-101)
May 20 06:43:19.110: HQM: hulc_fex_qos_buffer_conf:
hulc_fex_qos_buffer_conf: queuenum=4 size=20 (FEX-101)
May 20 06:43:19.110: HQM: hqm
20 06:43:19.113: HQM: s88g_qd_get_queue_threshold: s88g_qd_get_queue_threshold:
max_limit = 3200, set to 350. (FEX-101)
May 20 06:43:19.113: HQM: s88g_qd_get_queue_threshold: s88g_qd_get_queue_threshold:
max_limit = 3200, set to 350. (FEX-101)
<snip>

hulc_fex_qos_qthresh_map:**Setting dscp to output queue map**** (FEX-101)**
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map:
subopcode=2 startport=0 endport=0 size=1 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map: DscpBma
20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=32 iterator=0 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=33 iterator=1 (FEX-101)
May 20 06:43:19.169: HQM: hulc_fex_qos_qthresh_map: hulc_fex_qos_qthresh_map
dscp=40 iterator=2 (FEX-101)
<snip>